# 2. Bitmap

Program Name: Bitmap.java Input File: bitmap.dat

A bitmap is a rectangular grid of bits. A bit may have one of two values, most commonly represented as 0 and 1. In this problem, you will be given a bitmap of 0s and 1s, and you will have to determine the area of the largest rectangle that is filled with 1s.

#### Input

The first line of input consists of two space-separated integers, m and n, which represent the dimensions of the bitmap, where m is the number of rows and n is the number of columns. This will be followed by m lines of n bits each.

## Output

The output will be a single line giving the area of the largest rectangle that is filled with only 1s. You may think of the area as the total number of 1s in that rectangle.

#### **Constraints**

```
1 \le m \le 1000

1 \le n \le 1000
```

### **Example Input File**

## **Example Output to Screen**

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